Appl. No. 09/821,858 Amendment Dated April 7, 2004 Reply to Office Action of January 7, 2004

Remarks:

Reconsideration of the application is requested.

Claims 1-14 are now in the application. Claims 1 and 9 have been amended. Claim 8 has been canceled. Claim 14 has been added. Claims 11-13 were previously withdrawn.

In item 2 of the Office action, the Examiner rejected claims 1, 2, 5-6, 8, and 10 as being obvious over Henrie (U.S. 3,907,981) in view of Nishino (JP 64-020498) and Saalfrank (DE 33 39 242) under 35 U.S.C. § 103(a).

The rejection has been noted and the claims have been amended in an effort to define more clearly the invention of the instant application. Support for the changes to claim 1 is found in claim 8. In addition, support for new claim 14 can be found in Fig. 2 and page 16, line 22, through page 17, line 2, of the specification.

Before discussing the prior art in detail, a brief review of the invention as claimed is provided. Amended claim 1 calls for, inter alia, a device for recombining hydrogen and oxygen in a gas mixture that includes the following features:

an internally insulated housing containing said heating chamber. (Emphasis added by Applicants.) Appl. No. 09/821,858 Amendment Dated April 7, 2004 Reply to Office Action of January 7, 2004

The advantages of such a configuration are disclosed in the specification at page 9, line 5, through page 10, line 22; and page 15, line 24, through page 16, line 13. As taught by the specification, containing the heating chamber in the internally insulated housing allows the recombination device according to the invention to be employed while maintaining the otherwise customary design parameters (i.e. flow rates and the like) with substantially reduced operating temperatures. Thus, a considerably increased operating or life span for the used components is obtainable so that the recombination system according to the invention can be planned, even economically, with considerably reduced characteristic cost. The object of the invention described in amended claim 1 (previously claim 8) is to provide a recombination device having flexible modes of operation and high reliability for an especially long lifespan.

Contrary to the Examiner's opinion set forth in the final Office action, amended claim 1 is not obvious in light of the cited prior art. To begin, the need to use three references to show the invention as claimed undermines the argument that claim 1 was obvious. The further limitation added from claim 8 that the housing should have an internal insulation, cannot be gathered from any of the references cited as state of the art, not even when taken singly. The Examiner asserts that

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also the system according to Saalfrank should have a housing with an internal insulation. This interpretation, however, is incorrect, because Fig. 1 of Saalfrank shows that the insulation element 42 encapsulates the housing(contra "internally insulated housing").

Accordingly, none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Therefore, claim 1 is patentable over the art.

Moreover, because all of the dependent claims are ultimately dependent on claim 1, they are believed to be patentable as well.

In addition, newly added claim 14 is patentable for the following reason. Claim 14 teaches, inter alia, that the internally insulated housing continuously surrounds the recombinator unit (2) to the deflecting device (48). In contrast, the system according to Saalfrank does not show an insulation system extending continuously. Accordingly, the advantages now obtainable according to the invention could not even be obtained when using the insulation according to Saalfrank.

In view of the foregoing, reconsideration and allowance of claims 1-10 and 14 are solicited. In the event the Examiner should still find any of the claims to be unpatentable, please

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telephone counsel so that patentable language can be substituted. In the alternative, the entry of the amendment is requested as it is believed to place the application in better condition for appeal, without requiring extension of the field of search.

If an extension of time for this paper is required, petition for extension is herewith made.

Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

LOREN DONALD PEARSON

Reg. No. 42,987

LERNER & GREENBERG, P.A.

P.O. Box 2480

Hollywood, FL 33022-2480

Tel: (954) 925-1100

Fax: (954) 925-1101